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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/360,575	07/26/1999	SCOTT A. VANSTONE	67539/00230	4374

27871 7590 02/09/2007
BLAKE, CASSELS & GRAYDON LLP
BOX 25, COMMERCE COURT WEST
199 BAY STREET, SUITE 2800
TORONTO, ON M5L 1A9
CANADA

EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	09/360,575		VANSTONE, SCOTT A.	
	Examiner		Art Unit	
	Brandon S. Hoffman		2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 9-19 are pending in this office action.
2. Applicant's arguments, file November 28, 2006, have been considered and are persuasive. However, a new ground of rejection has been made.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 9-14, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiguro et al. (U.S. Patent No. 5,396,558) in view of Boers et al. (U.S. Patent No. 5,637,846).

With respect to Claim 9, Ishiguro et al. teaches a method of performing a transaction in a communication system between a first and a second participant wherein said second participant permits a service to be provided to said first participant in exchange for a payment (abstract), said method comprising the steps of:

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- Upon initiation of said transaction by said first participant, said second participant sending a first message to said first participant, said first message including information pertaining to said second participant (col. 2, lines 40-42);
- Said first participant verifying said information pertaining to said second participant to obtain assurance that said service will be provided upon assuring said payment (col. 2, lines 43-47);
- Said first participant sending a second message to said second participant, said second message including information pertaining to said first participant (col. 2, lines 48-51); and
- Said second participant verifying said information pertaining to said first participant to obtain assurance that payment will be secured upon provision of said service (col. 2, lines 52-56);
- Upon verification of said information pertaining to said first participant, said second participant obtaining a digital signature for said first participant on said transaction using said second message (col. 3, lines 35-46).

Ishiguro et al. does not teach whereby said second participant may obtain payment from a third participant using said digital signature.

Boers et al. teaches whereby said second participant may obtain payment from a third participant using said digital signature (col. 5, lines 39-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine obtaining payment from a third party using said digital signature, as taught by Boers et al., with the system of Ishiguro et al. It would have been obvious for such modifications because the terminal (merchant) needs payment for the service they provide; by sending the PIN and other identifying information to a bank for payment, the proper account (card holder's account) can be identified and the funds transmitted to the terminal.

With respect to Claim 10, Ishiguro et al. in view of Boers et al. teaches the limitation of wherein said first participant is a holder of a card which performs cryptographic operations (see col. 2, lines 16-25 of Ishiguro et al.). The cryptographic operations are disclosed on col. 2, lines 26-61.

With respect to Claim 11, Ishiguro et al. in view of Boers et al. teaches the limitation of wherein said second participant is a terminal (see col. 2, lines 43-47 of Ishiguro et al.).

With respect to Claim 12, Ishiguro et al. in view of Boers et al. teaches the limitation of wherein said third participant is a financial institution (see col. 5, line 48 of Boers et al.).

With respect to Claim 13, Ishiguro et al. in view of Boers et al. teaches the limitation of said information pertaining to said second participant included in said first message includes details and credentials of said second participant (see col. 2, lines 48-51 of Ishiguro et al.); and said first participant verifies said details and said credentials (see col. 2, lines 52-56 of Ishiguro et al.).

With respect to Claim 14, Ishiguro et al. in view of Boers et al. teaches the limitation of said information pertaining to said first participant included in said second message includes details and credentials of said first participant (see col. 2, lines 40-42 of Ishiguro et al.); and said second participant verifies said details and said credentials (see col. 2, lines 43-47 of Ishiguro et al.).

With respect to Claim 18, Ishiguro et al. in view of Boers et al. teaches the limitation of wherein said credentials include a public key certificate (see col. 2, lines 52-56 of Ishiguro et al.). The presence of a public key and terminal identification number being used to verify validity of a digital signature requires the presence of a public key certificate.

With respect to Claim 19, Ishiguro et al. in view of Boers et al. teaches the limitation of wherein said challenge is a nonce (see fig. 10 and col. 16, lines 1-6 of Ishiguro et al.). A time stamp is used as a time variant parameter to prevent against replay attacks.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiguro et al. (USPN '558) in view of Boers et al. (USPN '846) in further view of Chaum (U.S. Patent No. 5,276,736).

With respect to Claim 15, all the limitation above are met by the combination of Ishiguro et al. in view of Boers et al. except the limitation disclosed below.

Chaum meets the limitation of said second participant generating a response to said challenge (col. 3, lines 57-60); and said second participant sending a third message including said response to said first participant (col. 3, lines 57-60); and said first participant verifying said response (col. 3, lines 52-55 and 57-62); and said first participant sending a fourth message to said second participant such that said digital signature is provided by said second message and said fourth message (col. 4, lines 20-27, 57-60). The message being signed reflects a digital signature being appended to the message being sent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chaum within the combination of Ishiguro et al and Boers et al. because verification of the challenge prevents an outside attacker from using a replay attack to gain access to the system. The challenge is unique and once verified, provides a greater guarantee that the transaction is in fact legitimate.

With respect to Claim 16, the combination of Ishiguro et al. in view of Boers et al./Chaum teach said second participant verifying information in said fourth message (see col. 4, lines 20-27 of Chaum); and said second participant completing said transaction by providing said service (see col. 4, lines 44-47 and 57-60 of Chaum); and said second participant sending said third participant a subset of said first, second, third and fourth messages to obtain said payment (see col. 4, lines 35-45 of Chaum).

With respect to Claim 17, the combination of Ishiguro et al. in view of Boers et al./Chaum teach said third participant verifying said subset (see col. 4, lines 37-43 of Chaum); and said third participant providing said payment to said second participant (see col. 4, lines 44-47 of Chaum).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Branda Rph

BH

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Nasser Moazzami
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